Table of Contents

STATE AUTOMATION SYSTEMS STUDY

SITE VISIT: JUNE 29 - JULY 1, 1993

IDAHO STATE REPORT

September 8, 1994

FINAL

Prepared for:

Diana Perez, Project Officer
Office of Analysis and Evaluation
Food and Nutrition Service
3101 Park Center Drive
Alexandria, VA 22302

FNS Contract No. 53-3109-2-007

TABLE OF CONTENTS

Table of Contents

TABLE OF CONTENTS

Table of Contents

TABLE OF CONTENTS

APPENDICES

Table of Contents

LIST OF TABLES

APPENDIX A - State of Idaho Exhibits

IDAHO STATE REPORT

Site Visit: June 29 - July 1, 1993

STATE PROFILE

System Name:	Eligibility Programs Integrated Computer Systems (EPICS)
Start Date:	1982
Completion Date:	November 1986
Contractor:	Systemhouse, Inc.
Transfer From:	State developed
Cost:	
Actual:	$7,666,445
Projected:	$3,763,030
FSP Share:	$3,248,088
FSP %:	42.37%
Number of Users:	299 (Eligibility workers and supervisors only)
Basic Architecture:	
Mainframe:	IBM 3090/300J
Workstations:	3178 and 3191 terminals
Telecommunications Network:	Microwave network supported by 56 KB lines to regional offices and 19.2 KB lines to field offices
System Profile:	
Programs:	Aid to Families with Dependent Children, Food Stamp Program, Medicaid, State supplement to Supplemental Security Income for the Aged, Blind, and Disabled

1.0 STATE OPERATING ENVIRONMENT

The Idaho Department of Health and Welfare (DHW) consists of eight major operational divisions: Veterans' Services, Environmental Quality, Health, Welfare, Family and Community Services, Human Resources, Management Services, and Information Systems. The Division of Welfare is responsible for the administration and operation of the Food Stamp Program (FSP). The following bureaus report to the Administrator of the Welfare Division: Welfare Programs, Child Support Services, Facility Standards, Medicaid Policy and Reimbursement, and Medicaid Systems and Operations.

Systems support is provided by two groups. The DHW Information Systems Division (ISD) provides applications support for the automated systems supporting the Food Stamp Program and other assistance programs. Major project development and on-going application support is provided by ISD. Systems support for the mainframe central computer, located at the State data center, is provided by the State Auditor's Office under the direction of an elected official, the State Auditor.

The State population in 1990 was 1,011,986. Approximately 5.8 percent were food stamp recipients.

The unemployment rate in Idaho decreased steadily between 1986 (8.7 percent unemployment) and 1989 (5.1 percent); however, in 1990 the statewide unemployment rate began to rise. Idaho's unemployment rates for 1990 and 1991 were 5.8 percent and 6.1 percent, respectively.

The October 1992 report, *The Fiscal Survey of States*, provided the following information compiled by the National Association of State Budget Officers:

- Idaho's nominal expenditure growth for Fiscal Year (FY) 1993 was in the 0.0 percent to 4.9 percent range; the national average of 2.4 percent also was within this range.
- Idaho reduced the 1992 budget by $2.0 million after it was approved; public school funding was exempted from these reductions.
- State government employment levels increased by 0.98 percent, which differed in direction and magnitude from the national average decrease of 0.60 percent.
- Idaho did not implement any changes to increase or decrease revenues for FY 1993.
- The regional outlook indicated that the Rocky Mountain States are experiencing relatively strong economic growth. The region's average per capita personal income increase of 3.6 percent was higher than the national average increase of 2.4 percent, and the region's weighted unemployment rate of 6.3 percent was lower than the national average rate of 7.8 percent.

2.0 FOOD STAMP PROGRAM OPERATIONS

Food Stamp Program operations are integrated with the Aid to Families with Dependent Children (AFDC) and Medicaid Programs at the local level as well as at the central office. The State's 30 local offices are organized into seven regions, with a regional director overseeing each. The administrative reporting structure for the local offices is handled through the regional offices. Regional directors report to the Director of the Department of Health and Welfare and are responsible for the operation and supervision of all regional and local offices.

The Bureau of Welfare Programs interprets and implements Federal and State policies. It performs planning, evaluation, and monitoring for the Food Stamp Program and other assistance programs. Within the Bureau of Welfare Programs, FSP policy staff report to the Policy Section Supervisor, who reports to the Chief of the Bureau of Welfare Programs.

2.1 Food Stamp Program Participation

The average monthly participation for the FSP and other assistance programs, as reported by State staff, is provided below in Table 2.1. The data indicates that participation changes in Idaho varied considerably among programs. Participation in the Food Stamp Program increased by nearly 5,500 households, a 25.9 percent increase, over the last five years. During the same period, the number of individuals participating in the FSP increased by 25.8 percent. The increase in the number of AFDC cases during the same period was 12.4 percent, while the number of individuals receiving Medicaid assistance increased by 110.8 percent between 1988 and 1992.

Table 2.1 Average Monthly Public Assistance Participation

Program	1992	1991	1990	1989	1988
AFDC - cases	7,267	7,058	6,269	6,163	6,465
AFDC - individuals	19,095	18,974	16,801	16,591	17,485
FSP - households	26,484	24,221	21,004	21,255	21,032
FSP - individuals	74,071	68,022	58,605	59,471	58,848
Medicaid - individuals	66,038	53,422	39,637	35,756	31,328
General Assistance	N/A	N/A	N/A	N/A	N/A
Foster Care	556	600	508	547	517

2.2 FSP Benefits Issued Versus FSP Administrative Costs

In Idaho, the ratio of benefits issued to FSP administrative costs has improved from 9.2:1 in 1988 to 12.2:1 in 1992.

Idaho's average monthly benefit issued per household during the past five years, as provided in Table 2.2, has increased every year except 1989.[1]

Table 2.2 FSP Benefits Issued

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	$171.08	$167.64	$159.49	$144.36	$147.76

2.3 FSP Administrative Costs

Idaho's Food Stamp Program Federal administrative costs for the past five years are provided in Table 2.3.[2] During this period, total administrative costs decreased in 1989 and increased in each subsequent year. The average cost per household during the period showed a downward trend.

Table 2.3 FSP Federal Administrative Costs

	1992	1991	1990	1989	1988
Total Annual FSP Federal Admin. Cost	$4,363,997	$4,057,902	$3,680,673	$3,662,236	$4,084,781
Avg. Federal Admin. Cost Per Household Per Month	$14.01	$14.46	$14.86	$14.46	$16.00

2.4 System Impacts on Program Performance

Areas of Food Stamp Program performance that could potentially be affected by the automated systems that support the program include:

- Staffing
- Responsiveness to Regulatory Change
- Combined Official Payment Error Rates
- Claims Collection
- Certification/Reviews

[1] The number of households and benefit amounts use data reported in the FNS *State Activity Reports* each year.

[2] The number of households and FSP Federal administrative costs are derived from data reported in the FNS *State Activity Reports* each year.

2.4.1 Staffing

Idaho has a total of 299 full-time eligibility worker (EW) and EW supervisory staff. Eligibility workers account for 260 of these positions, and there are 39 EW supervisors in the local offices. Other staff at the regional and local offices include: 30 registration workers, 30 identification card issuers, and seven regional directors.

Staffing levels increased in recent years to accommodate the increases in caseload. Despite Idaho's addition of eligibility worker staff, staffing levels remained insufficient to handle caseload increases during the past two years. When DHW implemented the Eligibility Programs Integrated Computer Systems, the intent was to increase productivity so that workers could handle more cases and be more effective in working with clients.

2.4.2 Responsiveness to Regulatory Change

As detailed in Exhibit A-2.1 in Appendix A, Idaho has experienced some difficulty in meeting required implementation dates for Federal regulatory changes. Regulations that were not implemented on time included the: Mickey Leland Domestic Hunger Relief Act provision relating to exclusion of resources for Food Stamp purposes (code 1.3), Mickey Leland Domestic Hunger Relief Act provision covering the use of a standard estimate for shelter expense for households with homeless members (code 1.4), administrative improvement and simplification provisions of the Hunger Prevention Act (code 2.1), and Disaster Assistance Act and non-discretionary provisions of the Hunger Prevention Act (code 3.2). State officials indicated that the Federal government sometimes did not provide sufficient lead time for the implementation of regulations. Transmittal letters from the Western Regional Office, reflecting the date of notification and the required implementation dates, demonstrated this. The State also expressed concern about Federal requirements to implement legislative provisions before receiving final regulations.

The State's procedures for implementing regulatory changes also impacts the timeliness of the changes. Whenever there is a change in Federal regulations, the State has to modify State rules. The normal process requires 120 days once the rule has been written in the State's format. Management information system (MIS) staff usually make system changes during this period. The rule usually is published so that welfare advocacy groups have an opportunity to respond. An emergency change makes the regulatory change effective immediately, without hearings or system changes. Advocacy groups are given an opportunity to comment after the rule has been implemented.

Policy staff also are involved in the legislative change process. In the past, the policy staff would write very detailed instructions for field workers whenever there was a legislative change. Policy staff now send out less detailed circular letters and must coordinate their efforts with MIS staff. This has resulted in policy staff having less control over implementation timeframes for regulatory changes.

2.4.3 Combined Official Payment Error Rate

Idaho's official combined error rate, as indicated in Table 2.4, has fluctuated between 1988 and 1992. The State's error rate decreased from 1988 to 1989, increased in 1990 and 1991, and decreased again in 1992.

Table 2.4 Official Combined Error Rate

	1992	1991	1990	1989	1988
Combined Error Rate	7.18	9.50	8.44	7.85	10.39

Even though workers have been handling increased caseloads, Idaho generally has been able to maintain error rates lower than the national average. Error rates increased in 1991, as the average caseload per worker increased, causing the State to approach the error rate level at which it would be penalized.

2.4.4 Claims Collection

Table 2.5 presents data indicating the total value of claims established, the value of claims collected, and the percentage of claims established that were collected.[3] The dollar value of claims established increased each year except 1991, and the dollar value of claims collected increased each year during the period.

Idaho's claims collected as a percentage of claims showed year to year variation, but overall it increased slightly during the five-year period. The percentage decreased in 1989, increased in 1990 and 1991, and decreased in 1992.

[3] The claims collected and claims established figures use data reported in the FNS *State Activity Reports* each year.

Table 2.5 Total Claims Established/Collected

	1992	1991	1990	1989	1988
Total Claims Established	$589,043	$443,269	$465,922	$458,767	$330,411
Total Claims Collected	$383,698	$337,794	$290,107	$215,476	$202,362
As a % of Total Claims Established	65.1%	76.2%	62.3%	47.0%	61.2%

2.4.5 Certification/Reviews

Idaho's system has been operational since the end of 1986. EPICS received Family Assistance Management Information System (FAMIS) certification in September 1988. Idaho staff were unable to provide the date on which the Food and Nutrition Service (FNS) post-implementation review was conducted.

3.0 OVERVIEW OF THE SYSTEM

EPICS is an integrated system that supports the Food Stamp, AFDC, and Medicaid Programs. It also determines eligibility and calculates benefits for the State supplement to Supplemental Security Income (SSI) for the Aged, Blind, and Disabled. EPICS interfaces with Foster Care (Title IV-E) to put children on the Medicaid eligibility file and in the State's separate Child Support Enforcement (CSE) system.

3.1 System Functionality

EPICS currently provides some on-line capabilities to workers, but the system processes changes, determines eligibility, and calculates benefits during overnight batch processing

maintenance, access to other systems (e.g., Child Care), and income and expense calculations.

The major features of EPICS functionality are described in this section. Areas addressed include:

- ***Registration.*** During application registration, workers register clients on the EPICS mainframe in an on-line mode. Clerical staff enter name, address, Social Security number (SSN), sex, and date of birth for each household member. Registration can be performed even with incomplete information, such as partial last names, first name initials, and incorrect SSNs.

  EPICS performs on-line searches against several sources including: the EPICS database, the State Department of Employment, and the State Department of Transportation. Idaho also plans to use information from the Disqualified Recipient Subsystem once it is operational by setting an indicator in the case record of intentional program violators. The system searches the EPICS database to determine whether the applicant previously has applied for food stamp, AFDC, and/or Medicaid benefits. This search is performed on active and closed cases for both expedited and regular applicants. EPICS searches the Idaho Department of Employment databases for wages and unemployment insurance benefits and searches the Department of Transportation database for vehicle resources. These searches also are performed for expedited and regular applicants. If an applicant is known to the system, EPICS can copy information from historical records into the current record.

  At registration, EPICS assigns a client and case identification number, which is not the applicant's SSN. EPICS maintains the case/client record if the application is denied. Application registration, therefore, is permitted even if the applicant's SSN matches a number in the system. Since EPICS does not permit entry of a duplicate SSN, the worker leaves the SSN blank until the correct SSN can be determined.

  Other activities are performed outside the system by registration workers. For Food Stamp Program applicants, registration workers complete pre-screening forms to determine whether there is a need for expedited food stamps. Client interviews are scheduled manually and cannot be done by EPICS.

- ***Eligibility Determination.*** Application information is entered into the system by the eligibility worker after the worker has completed the client interview and the verification sheet. EPICS provides the appropriate screens for each assistance program. As a result, the system does not collect information needed for AFDC or Medicaid eligibility if an applicant is applying only for FSP benefits. The system provides immediate on-line edits for the data entered by the worker, but it is still possible for undetected case errors to exist. Once the application

information is sent to the mainframe for overnight processing, missing information and other errors may be identified.

One of the limitations of the minicomputers located in the regional offices is that each case record is limited to only three assistance programs. If the applicant wishes to apply for more than three assistance programs, a second case must be created with a different case number. The two cases then are cross-referenced in the file. Once EPICS is migrated to one central mainframe, this program limitation will be eliminated.

- ***Benefit Calculation.*** EPICS calculates benefits in an overnight batch process on the mainframe, but EWs have the capability to perform a trial eligibility determination and benefit calculation using the minicomputer. This feature is helpful to the worker in responding to applicant questions regarding eligibility and benefit levels. The day after information is sent to the mainframe, EPICS provides the local office with client notices indicating applicant eligibility determination results and benefit amounts. The worker reviews the notices and sends them to applicants. If EPICS does not provide a notice for an applicant, the worker reviews the daily transaction log to identify errors in the transaction. Workers can call the HELP desk to obtain assistance with problem cases.

- ***Benefit Issuance.*** The primary method of issuing FSP benefits in Idaho is mail issuance. Since 1979, Idaho has had a contract with the Sacramento Systems Development Corporation (SSDC) for mailing coupons to clients. EPICS creates and transmits daily and monthly issuance files to SSDC. Issuance records transmitted to SSDC in the morning are processed and mailed by 3 p.m. on the same day. SSDC sends food coupons to high risk areas and allotments exceeding $250 by certified mail.

  The other issuance method used in Idaho is an Authorization-to-Participate (ATP) system. ATPs are used only for expedited coupon issuance in Boise. ATP cards are printed by the Auditor's Office and sent by courier to the regional office. Clients can pick up ATP cards the day after application for expedited food coupon assistance has been made. Clients exchange ATPs for food stamps at the Boise Post Office. Only a small number of ATPs are issued each month.

  For three days each month, the mainframe is unable to process cases that are entered during the day because it is processing AFDC checks, performing monthly rollover, or generating management reports. If expedited benefits are needed, the worker can telecopy a transmission form to SSDC for expedited coupons. SSDC manually enters the information into its system, and the transaction is identified on a reconciliation listing sent to the State central office. The local offices send in the food stamp adjustment form or the telecopy transmission form to the central office, where a manual reconciliation is performed 30 days after the month has ended.

DHW staff monitor issuance timeliness very carefully, primarily because the State wants to be able to continue using mail issuance, which costs less than other types of issuance. If mail issuance failed to meet required issuance timeliness standards, DHW would need to switch to another issuance method. Timely issuance occurs in almost all cases in Idaho. This is possible due to the capability to transmit requests to SSDC via facsimile whenever the system is unable to determine eligibility or calculate benefits.

The eligibility worker requests replacement benefits through the minicomputer. The original document number, the case number, and the action are entered and linked to the replacement document. There is an edit on the zip code to ensure that all zip codes entered are valid for Idaho.

- ***Notices.*** The EPICS system can print up to five client notices on a single form that is mailed to the client. EPICS automatically creates the notice and prints it locally. The eligibility worker reviews the notice and can add handwritten notes if desired. The notice is mailed from the local office. A worker can also initiate, print, and mail special notices from the local office.

- ***Claims System.*** The claims collection and tracking system is fully integrated with EPICS. EPICS tracks the claim status, calculates the monthly recoupment amount, subtracts the recoupment amount from the recipient's monthly benefit issuance, and generates a notice to the client. The collection method is determined by EPICS.

  Eligibility workers enter the cause of the underpayments or overpayments into the system and whether fraud is suspected. The worker can calculate the corrected benefit amount for the past eleven months, if appropriate, and then select a repayment amount of 10 percent or 20 percent. The EW supervisor must approve the establishment of a claim for entry into the overpayment system and the creation of the recoupment plan.

- ***Computer Matching.*** Other than the on-line matching performed at registration with the State Departments of Employment and Transportation, computer matching is performed in batch mode. Wage matching is performed biweekly, and State Data Exchange (SDX) matching is performed weekly. Idaho performs matching against Vital Statistics, compatible employment and public assistance databases from other states, the Idaho Child Care Program (ICCP), and the Absent Parent and CSE system. Batch computer matching is performed on all new and on-going cases. Matching also is performed whenever a new household member is added.

  All discrepancies are reported to the worker through paper printouts. Most discrepancies are due to differences in accounting periods and data definitions. The system requires that the worker resolve the differences and update the case. Eligibility worker supervisors are responsible for monitoring match resolutions.

- ***Alerts.*** At the end of the month, EPICS provides a report of problem cases. Case management reports also show alerts. Both the worker and the system may generate alerts. System generated alerts only can be deleted by the system. Similarly, workers must delete worker generated alerts. The system only displays alerts for the current month to EWs.

- ***Monthly Reporting.*** Idaho has not required monthly reporting since May 1993.

- ***Report Generation.*** The system provides many reports to the worker on a daily and monthly basis. When EPICS migrates to the mainframe, DHW expects to eliminate some of the hard copy reports at the local level.

  Ad hoc reporting is possible with EPICS; however, these reports cannot be generated by the end user. Special reports can be requested by program staff and generated by systems staff. The level of difficulty and time required to produce the report varies based on the nature of the request. Program staff expressed the belief that the reporting capabilities of EPICS are less advanced than the reporting capabilities of the predecessor system.

- ***Program Management and Administration.*** EPICS contains features that provide better audit trails and make it easier to identify fraudulent activities. Through EPICS, staff can determine if an address is being used for multiple cases. In one case, the State was able to identify a staff member who had attempted to defraud the system through diversion of benefit checks to a personal checking account. An audit trail is provided through transaction logs that are produced for every system transaction.

  EPICS also provides electronic mail to all level of staff. It is used by the HELP desk in the central office, by regional office trainers responding to eligibility workers, and as a means of updating workers about system changes.

  EPICS also provides monthly management reports indicating the caseloads for each worker, the number of applications received, the number denied, the number pending, and the number certified. This permits some caseload shifting within local offices to balance the workload and provides documentation for an annual caseload review by regional program managers and central office bureau chiefs.

  EPICS offers a table maintenance option to all workers. With this option, workers can view all EPICS tables, the appropriate codes, and the rules associated with each table. Access to these tables is valuable to workers since the tables can be used as a help screen or an on-line policy manual. Table maintenance contains all notices, past and present, with the effective date for each notice. It also provides code definitions and income calculation tables for all prior years. Local workers cannot make changes to the tables; however, program staff in the central office can make table changes. Program staff indicated that they believed that the table-driven system makes it easier for the State to implement mass changes.

The State is examining the feasibility of developing an on-line policy manual.

3.2 Level of Integration/Complexity

EPICS supports the Food Stamp, Aid to Families with Dependent Children, and Medicaid Programs. The system is very complex, requiring intensive user training and a great deal of maintenance support.

EPICS interfaces with several external systems and databases. System interfaces include Foster Care (Title IV-E) and Child Support Enforcement. In addition, EPICS interfaces with external databases used in computer matching. The databases with which EPICS interfaces include employment and public assistance databases for Wyoming, Utah, Washington, and Oregon.

3.3 Workstation/Caseworker Ratio

Under EPICS, eligibility workers have dedicated terminals, and other staff also are provided with terminals. Besides eligibility workers and EW supervisors, other staff with terminals include local office clerical staff, regional office personnel, and staff at the State's central office.

3.4 Current Automation Issues

The distributed architecture in Idaho requires that databases be maintained on both the central mainframe and the regional minicomputers. Despite the requirement to have the mainframe and minicomputer databases synchronized, data differences between the mainframe and the minicomputers are common. When the batch transmission between the mainframe and the minicomputers exceeds the allotted timeframe, updates from the regions do not get included in the overnight mainframe processing. This contributes to the database synchronization problems.

The migration of software from the regional minicomputers to the central host mainframe is now scheduled for April 1994. This planned date includes a delay of approximately four months to provide sufficient time for system testing prior to implementation.

Program staff indicated that the implementation of EPICS was a horrible experience that continues to effect staff members' attitudes towards new systems. Despite the problems and deficiencies of EPICS, staff are extremely reluctant to implement another new system in the future because EPICS implementation was difficult and problematic, as detailed in section 4.7.

4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION

This section discusses the approaches used in Idaho to develop EPICS, which was implemented in 1986, and subsequent system enhancements.

4.1 Overview of the Previous System

When Idaho submitted its first Advanced Planning Document (APD) for EPICS, the existing AFDC system was 14 years old and was not integrated with systems that supported the Food Stamp and Medicaid Programs. The system that supported the Food Stamp Program was a separate, automated system that required eligibility workers to send data entry documents from the field to a central site for entry into the system. The system captured net income and household information and calculated benefit amounts.

4.2 Justification for the New System

Projected benefits were estimated for EPICS in 1982. The objectives that Idaho hoped to achieve with EPICS included:

- Elimination of duplicate application registration through the creation of client and case indices
- Timely updates of case file information through on-line data entry at the regional level (this was changed to permit EWs to update cases from dumb terminals at local offices)
- Avoidance of calculation errors through the development of an automated calculation module
- Increased worker productivity through automated eligibility determination and client notification
- Improved case management through automated worker alerts and case reporting for supervisors
- Decreased overpayments through improved information and verification capabilities made possible by improved access to data as a result of automated interfaces with other programs and agencies
- Improved identification and recoupment of overpayments as a result of establishing a billing and collection module for nonactive or ineligible clients
- Improved timeliness and reduced mailing costs through the use of regional turnaround documents and report printing (this subsequently was changed to permit local offices to print case management reports and edit reports)
- Facilitation of the regulatory change process through the use of tables and structured programming
- Increased security with respect to database access

Idaho also expected that the new system would result in decreased error rates, an increased collection rate for overpayments and claims, and the ability for workers to handle increased caseloads.

4.3 Development and Implementation Activities

The EPICS development effort was divided into phases. Phase 1 focused on system planning. Phase 2 was devoted to the internal system design, while Phase 3 focused on the external design. The primary tasks for Phase 4 were the systems test and the development of the administrative procedures manual.

EPICS development was initiated in 1982. The initial APD for the system was submitted in August 1982 and approved by FNS in February 1983. In March 1983, the State submitted a Request for Proposals (RFP) to the Federal agencies for the acquisition of computer equipment to support its planned system. On August 8, 1983, the Department of Health and Human Services (DHHS) approved the State's RFP. In February 1984, Systemhouse was selected to provide contractor assistance to the State in developing the system.

Idaho continued to submit APDs and APD Updates (APDUs) throughout the EPICS development period. The APDUs submitted in 1985 and 1986 increased equipment and other development costs and delayed implementation. The system was fully implemented in November 1986.

In September 1987, Idaho submitted an APD requesting funding to migrate 76 software programs from the IBM 8100 minicomputers to the mainframe host computer and to shift from a night batch process to on-line processing using CICS. These proposed changes were part of the State's plan to obtain FAMIS certification for the system. The effort was expanded in 1988, when the State initiated its enhancement effort referred to as the "Migration" project. In 1989, the State released an RFP for EPICS migration. The minicomputers were upgraded to IBM 8150s to enable EPICS to function until the effort was completed.

Migration was initiated to complete EPICS and redesign the software and hardware to fix EPICS shortcomings. It has evolved into a longer project than was anticipated originally because the State has attempted to maintain compliance with new regulations and integrate all original EPICS functional requirements into the system. Migration involves two major stages. In the first stage, the distributed EPICS system is being centralized on a mainframe. In the second part of the project, EPICS will be redesigned to operate over a statewide token ring network utilizing local area networks (LANs) and wide area networks (WANs).

As part of the Migration project, system code will be rewritten to provide enhanced functionality. Modifications are planned in several areas including on-line eligibility determination, payroll, and monthly processing. These changes are to be made by the end of 1995. The enhancement effort is expected to require regional and local staff to

undergo minimal retraining, while providing staff with capabilities closer to those originally envisioned for EPICS.

Migration will be done in phases to control the impact on the system and the worker. The following phases are planned:

- ***Phase I, Requirements Definition and External Design.*** This phase, which involves the participation of field and central workers in joint application development (JAD) workshops, has been initiated.

- ***Phase II, Internal Design.*** The objectives for this phase include the development of technical specifications, including database design and transaction flows.

- ***Phase III, Code Construction.*** This phase focuses on the production of detailed design specifications and program code as well as policy manuals and training materials. At the conclusion of Phase III, the system should be fully functional and ready for system testing.

- ***Phase IV, Testing and Implementation.*** There are three major tasks comprising this phase: system testing, which will be done in a comprehensive and cohesive test environment; acceptance testing, which will test policy and procedures along with software functionality; and implementation, which will include conversion, training, and personal computer (PC)/LAN installation.

- ***Phase V, Network Design.*** This task involves the State data center and State Auditor staff in addition to ISD and program staff. A working model will be constructed and tested prior to implementation.

- ***Phase VI, Equipment Installation.*** This phase involves the installation of new equipment; however, old equipment will remain until conversion is complete.

4.4. Conversion Approach

EPICS trainers from the regional offices were used to train field staff. In some regions, supervisors were not trained initially. A training database was used in the field. The length of training time required for each field office varied according to user acceptance and the workers' ability to understand the system. Training lasted between one and two weeks.

Case conversion consisted of the automated conversion of existing data elements, worker validation of data converted by the system, and worker input of data elements required for EPICS that were not present in the old system. Workers spent months validating the data converted by the system. The progress made in the conversion effort before the mainframe became operational at system cutover was very limited because eligibility could not be determined or benefits calculated. Until the point that the State made the

irreversible switch from the old system to EPICS, cases could not be fully processed, and it was unknown whether the system was functioning accurately.

State staff have initiated preliminary consideration of conversion issues associated with the Migration project. Prior to migrating data to the mainframe, the databases on the regional minicomputers and the mainframe must be synchronized. State staff indicated that if a discrepancy exists that cannot be resolved, the mainframe data will be used. Additional data fields may be necessary, depending upon the results of the requirements definition. Data and code conversion also will be required because different databases and programming languages are used in the mainframe and minicomputer environments.

4.5 Project Management

There were two different project managers during EPICS development. The initial project manager, who directed the project from 1982 to 1985, had a strong Food Stamp Program background. The second project manager assumed the position in late 1985 and also had a program background. EPICS project managers reported to the Administrator of the DHW Welfare Division.

The EPICS project management team included program and MIS staff. Core representatives of the project team included two FSP staff, two AFDC staff, and two MIS staff from ISD. After Systemhouse was selected, the contractor also was part of the EPICS project management group.

State staff believed that assigned EPICS project management personnel did not have adequate expertise or enough exposure to run such a complex, interdisciplinary project. Program staff and some technical staff indicated that this issue continues to be a concern as the State proceeds with EPICS enhancements and migration.

Since EPICS was implemented, the project management organization has changed. Currently, Idaho has a steering committee, that is chaired by the Administrator of the Welfare Division, to oversee EPICS enhancements and migration. The committee is comprised of the Administrator of the DHW Information Systems Division, the Chief of the Bureau of Welfare Programs, and representatives from all assistance programs and field groups. During migration, the steering committee plans to meet weekly to ensure that the project proceeds in a timely manner and has adequate resources. The position of EPICS Unit Supervisor within the Division of Welfare has been created to provide a means of obtaining input and support from program management and staff. During migration, the EPICS Unit supervisor will serve as the project director and the liaison to the steering committee.

4.6 FSP Participation

Idaho had a high degree of field staff involvement during EPICS system design and development. Concept meetings were held among field staff in 1982. There was at least one representative from each of the seven regions as well as field trainers involved in

EPICS. Two central office positions were filled by field staff, and field personnel were used to test the system.

Since EPICS was implemented, a separate EPICS user liaison group has been established within the Division of Welfare. This group provides HELP desk services and is responsible for reviewing and recommending system changes, setting priorities for system changes, and testing changes.

4.7 MIS Participation

During EPICS development, MIS and the contractor worked with welfare automation systems specialists from the program and field areas. There were four analysts and two programmer analysts involved in EPICS development. In addition, 2.5 full-time equivalents (FTEs) provided support in the quality control and documentation areas. There were 14 contractor staff involved in the project. Contractor staff included a project manager, three programmer analysts, two programmers, and eight analysts.

Technical staff involved in the migration effort includes a project manager, six eligibility programming staff, 19 data processing programming staff, six systems and operational staff, and contractors. As a result of a study performed three years ago, which indicated that systems developed using modeling reduced both development cost and time and increased user satisfaction, Idaho is using modeling techniques for Migration development. Several contractors from Systemhouse and an independent technical advisor supplement State project staff. There are three contractors currently involved in the development effort. Two are specialists in modelling techniques, and the other is a CASE tool expert.

4.8 Problems Encountered During Development and Implementation

DHW encountered a number of problems during the development and implementation of EPICS. Problems occurred in the following areas:

- ***System architecture.*** The original design and functionality was changed in several ways during development, and this resulted in the need to make changes to the system. One change required was a shift from reliance on paper input documents

Idaho continued to experience system performance problems after implementing EPICS, and the major cause of these problems was attributed to the minicomputers. In September 1987, the State submitted an APD requesting funding to migrate functionality from the minicomputers to the host mainframe computer.

- ***Contractor Issues.*** The State and Systemhouse began having problems during the detailed system design stage of EPICS development. During the project, contractor costs were increased by approximately $600,000. The cost increases led State staff to believe that Systemhouse either purposely submitted an unrealistically low bid to obtain the work or misunderstood and underestimated the scope of the job. The contractor left Idaho in January 1986 without completing system development. DHW program and MIS staff withheld 20 percent of the contract amount because Systemhouse failed to produce an operational system. The State Auditor, however, later authorized payment of the 20 percent that was withheld. Idaho staff indicated that both the State and the contractor were partially responsible for the difficulties. State staff believed, however, that Systemhouse's effort was focused on system transfer and development efforts in other States, and Idaho's system was a low priority for the contractor.

- ***Schedule Changes.*** In the middle of February 1986, the EPICS implementation date was delayed to permit completion of the required modules. This schedule delay was the result of the contractor's premature departure with an incomplete system and the discovery of problems that required major software revisions.

- ***EPICS Conversion.*** EPICS conversion presented several problems for State staff. State staff anticipated that conversion would be disastrous; however, upper management personnel refused to accept bad news concerning conversion. Once conversion occurred, the system did not perform as planned. Front-end edits were inadequate, the system did not calculate benefits correctly, and benefits were not issued in a timely manner. Another problem with EPICS was related to the tolerance levels established for rejecting cases. Because 25 problems were required to reject a case, there were many situations in which case data were useless, but the cases were sent to the mainframe anyway. The resulting "dead" cases locked up both the cases and the system. Program staff worked overtime for months to make EPICS work.

For eligibility determination and benefit calculation results, EPICS was supposed to provide transaction logs and notices for the worker to review. The absence of a notice indicated that EPICS had truncated the case for some unknown reason. Transaction logs, containing unfamiliar codes, then had to be reviewed to figure out why a case could not be processed. Sometimes several days elapsed before eligibility determination and benefit calculation results were available.

Because EPICS did not work well when it was implemented, some staff learned to manipulate the system to get their work done. This resulted in the

circumvention of planned procedures and the formation of bad habits that have been difficult to break.

Another problem that impacted field users was the inability to work effectively in EPICS while programmer staff were working on system changes. Field staff could enter information but could not see the results of their work. Under these conditions, it sometimes required as long as five or ten minutes per screen to enter data into EPICS.

- ***APD Process.*** State staff believe that the APD process adds an unnecessary level of complexity to the system development process. State staff believe that the Federal agencies, especially the Health Care Financing Administration (HCFA), have unrealistic expectations. For example, short timeframes for investigating alternatives and implementing changes sometimes result in the need for manual changes and require the worker to use an old and new system concurrently. State staff believe that this problem could be alleviated at the Federal level if the Federal agencies had qualified technical staff who participated in formulating schedules and expectations. Under these conditions, State staff believe that Federal timeframes and expectations would be more reasonable.

There also have been some problems during the migration effort. There was some confusion with the initial RFP. The bids received exceeded the approved amount and did not meet all of the State's requirements. The RFP was revised and rebid. The initial timeframe of the project has been extended, and implementation dates have been delayed.

5.0 TRANSFERABILITY

Idaho initiated its review of other states' systems in 1982. State staff obtained information about other systems by reviewing materials from other States and through demonstrations given by other States and contractors. State systems considered included Alaska, Georgia, Louisiana, North Dakota, and Wisconsin.

Idaho ultimately decided to develop a system internally. The primary reason for this decision was the unavailability in 1982 of any systems that integrated Medicaid eligibility determination with AFDC and FSP functionality. There also were not many States that administered State supplements to SSI, and Idaho wanted that functionality in its system. Furthermore, Idaho wanted a distributed system architecture, and there were limited options in this area.

At the time EPICS development was initiated, there were plans to make it available for transfer to other States seeking a distributed system. There have been many problems with the system; however, and EPICS has not been transferred to any other States.

6.0 SYSTEM OPERATIONS

The following section provides a description of the systems that currently support FSP operations in Idaho. The description includes a profile of system hardware and a discussion of the system operating environment.

6.1 System Profile

The components supporting the EPICS system are as follows:

- **Mainframe:** IBM 3090/300J, MVS/XA, TSO, JES2
- **Disk:** IBM 3380, IBM 3390
- **Tape:** IBM 3420 9 track
IBM 3480 cartridge autoloader
- **Printers:** IBM 3835 page printers
IBM 4245 impact printer
- **Front End:** IBM 3725
- **Workstations:** IBM 3178 and 3191 terminals
- **Telecommunications:** Microwave network supported by 56 KB lines to regional offices and 19.2 KB lines to field offices

A detailed listing is provided as Exhibit A-6.1 in Appendix A.

6.2 Description of Operating Environment

The operating environment consists of several components. This section describes these components, which include the current operating environment, maintenance, telecommunications, performance, response time, system downtime, and plans for future system enhancements.

6.2.1 Operating Environment

The mainframe central computer that runs EPICS is located at the State data center, which is operated by the State Auditor's Office. The on-line window for EPICS is available from 6:30 a.m. to 6:00 p.m. The batch cycle runs from 6:00 p.m. to 4:30 a.m. and is followed by incremental backups and batch return transmissions to the minicomputers at the regional offices. The mainframe supports applications for the Auditor's Office, the Controller's Office, and other administrative users as well as EPICS.

At the central site, Idaho operates its IBM 3090/300J mainframe under the MVS/XA operating system. TSO is used for controlling on-line sessions, and JES2 is used for batch control. The State utilizes IBM NETVIEW for network control. ADABAS is the database manager, and standard query language (SQL) supports inquiry and reporting functions. Much of the batch system is written in NATURAL, but most of the on-line system has been converted to COBOL. Several tools from Sterling software are used for database control and monitoring.

At the remote sites, Idaho uses IBM 8150 minicomputers with IBM 3274 front-end control units, IBM 8809 tape units, and IBM 8102 disk drives. Each regional office is supported by three printers: an IBM 3262, a Harris H400 or H162, and a Xerox 4090. The system uses DPPX/SP along with a proprietary version of COBOL and a proprietary database manager.

The State has a security plan and uses Top Secret as its security software. This facilitates the interstate communication required for computer matching since other States involved also use Top Secret. Many of the system's security provisions were removed to make the system more efficient. There are some problems because the minicomputers and the mainframe both have separate security schemes.

The State's disaster recovery plan includes a hot site and an agreement with IBM. The agreement between IBM and the State requires the vendor to provide Idaho with a substitute mainframe if a disaster occurs. This plan has never been tested and is being revised. A SYSCO router controls network traffic and could route all systems transactions to the hot site, which is located in another State computing facility.

6.2.2 State Operations and Maintenance

There are 13 staff members within the DHW Information Systems Division that provide application support for EPICS. These staff include: one manager, five analysts, three programmers, and four programmer/analysts.

Operational support for EPICS is provided by the State Auditor's Office staff. The personnel involved include 1.5 FTEs dedicated to EPICS database administration, 1.5 FTEs dedicated to network support for EPICS, and 3.5 FTEs that provide computer operations support.

Idaho has experienced problems related to technical staffing. Most of the experienced ISD staff are dedicated to the migration effort and other projects, and few staff remain to support EPICS. Staff currently supporting EPICS have some concern about job security since the State's future direction is away from its current minicomputers and the software that supports them.

The State also has a significant problem attracting and retaining qualified staff. State budget costs have resulted in the elimination of merit pay increases in recent years. The State loses some experienced staff to private industry in Boise; however, the level of

private industry competition for technical staff is reduced because other businesses in the local area do not use ADABAS and NATURAL. State staff indicated that the shift towards CASE tools and COBOL may alleviate the staffing problem somewhat. Contract programmers and analysts represent another potential solution to the State's staffing problems because qualified staff are available at reasonable rates.

EPICS system maintenance consists of daily, weekly, and monthly activities. Incremental files are backed up nightly. System backups are run weekly on Friday night. Preventive maintenance is performed monthly. Database maintenance is performed monthly as necessary.

Program staff submit Customer Assistance Request forms to ISD personnel for desired system changes. Changes that represent top priorities due to their statewide impact are implemented quickly; however, many user-requested changes are not being implemented in a timely manner. The reasons for long delays in implementing these changes include technical staff shortages, system architecture limitations, limitations associated with a shared computer center, and the history of failed system development efforts.

6.2.3 Telecommunications

Idaho has a microwave network throughout the State. There are 56 KB lines from the State data center to the minicomputers in the regional offices. Regional offices are linked to field offices using 19.2 KB lines through routers. The State contracts with several carriers with different types of lines. US WEST supports the southern and eastern portions of the State and provides some fiber optic technology. AT&T is the common carrier in the northern part of the State and uses primarily copper wire. GTE supports the Pacific northwest portion of the State. A few of the independent phone companies in the State still employ analog technology. Backup plans involve the use of dial up capabilities through 19.2 KB lines.

The current telecommunications network does not meet State requirements for supporting EPICS; therefore a token ring network to support the public assistance system has been proposed. The current system is not fast enough and does not provide adequate backup capabilities and redundancy. The proposed network is comprised of a series of token ring baseband networks that form one logical ring. Approximately 33 WAN rings and 255 LAN rings are planned for the entire State. This type of configuration is a solution many States are considering because it supports imaging technology and file transfers between offices.

6.2.4 System Performance

There are several areas where capacity and system performance present problems with EPICS. Data center staff indicated that average mainframe utilization is 43 percent, and utilization at peak processing times is 52 percent; however, ISD staff indicated that there is some degradation of performance at peak processing times. Input/output (I/O) creates the system bottleneck. There currently are over 32 million records on the main database;

future growth could create problems since ADABAS has a limitation of 40 million records. The performance of the minicomputers is unacceptable to State staff. Peripherals and remote terminals employed are already at the capacity limitations of the minicomputers, and there is equipment in the field that cannot be used since the minicomputers cannot physically handle more devices.

On-line systems currently are being developed by other State agencies and DHW. More direct access storage devices (DASD), more controllers, and another database manager will be required once these systems and the migration project are completed.

The mainframe receives 22,537 on-line transactions daily, but the majority of EPICS transactions are stored on the minicomputers and uploaded to the mainframe during the batch cycle. There are approximately 11,700 food stamp transactions per day. These transactions generate two to three million database accesses or transactions.

6.2.5 System Response

Planned response time for all on-line transactions is four seconds, and State staff indicated that these targets generally are met. During peak processing periods, response times for name or SSN searches of participation records or response time for interactive screen entry can take six seconds. These response times represent user response times from the mainframe. All transactions go through the IBM 8150 minicomputers before reaching the mainframe, and State staff indicated that most response time problems can be attributed to the minicomputers. In extreme cases, response times are around 30 seconds. Response time has been an issue since the system was implemented. State staff believe that the system's response times are too slow to support interactive interviewing.

Batch processing can be performed on the mainframe computer during the on-line window without having any negative effects on response time because response time primarily is a function of the regional minicomputers. Payroll processing, which requires 14 hours, is run from 7 a.m. to 9 p.m. Management reporting and rollover also are long jobs (10 to 12 hours) that can be run concurrently with on-line processing.

6.2.6 System Downtime

Downtime has been a significant issue in Idaho since the system was implemented. Currently there are three days at the end of the month when the mainframe is unavailable, and the 8150 files are not updated. The impact of this downtime is tempered since eligibility determination and other update transactions occur during overnight processing rather than on-line. The minicomputers also are susceptible to breakdowns. On average, there are two days of downtime when a minicomputer fails. During the downtime, offices in the affected region process cases manually or dial directly into the mainframe. The speed of the lines between the minicomputers and the central mainframe is not acceptable by today's standards and results in slow response times. Problems also have occurred during weekend database maintenance activities that have resulted in one week of downtime.

6.2.7 Current Activities and Future Plans

The State plans to make some changes in the mainframe environment during 1994. State staff indicated that there are plans to upgrade the IBM 3090/300J operating system from MVS/XA to MVS/ESA. In addition, the State plans to add a hyperdisk, which is similar to a solid state disk in providing fast storage and retrieval capabilities.

As EPICS functionality is moved from the regional microcomputers to the mainframe, network capabilities and DASD will have to be upgraded. State staff did not provide specific information regarding the timeframes or the nature of these upgrades.

Current system activities focus on the migration effort. The CASE tool PREDICT, the Panvalet tool from Computer Associates, and the Construct tool from Software AG for screen and code generation are being adopted to support the system. As of July 1993, State staff anticipated employing NATURAL engineering workstations by the end of 1993.

Idaho's future direction involves the adoption of techniques expected to save development time and produce reliable systems. JAD, RAD, CASE tools, and modeling will be used to develop a client-server architecture that will incorporate LANs, WANs, and token ring networks and provide interconnectivity of all systems. The objective of this approach is to allow the user to get closer to relevant data and be able to retrieve data using SQL and related languages.

7.0 COST AND COST ALLOCATION

This section addresses the following topics: EPICS development costs and level of Federal funding, EPICS operational costs, and cost allocation methodologies for development and operational costs.

7.1 EPICS Development Costs and Federal Funding

Idaho submitted its initial APD for EPICS in August 1982, and it was approved by FNS on February 1, 1983. The workplan for the development effort described tasks with projected costs assigned to each task. The cost to complete EPICS was initially estimated at $3,763,030. The initial APD was first amended in 1984. Total development costs were estimated to be about $3,695,458 and equipment costs were expected to total $1,451,519. In March 1985, development cost estimates were amended again. Total development costs, excluding equipment, were increased to $3,701,890, and equipment costs were increased to $1,796,081.

EPICS originally was scheduled for implementation in June 1986, but implementation was delayed until November 1986 due to several operational problems that required major software revisions. These revisions and the estimated costs for them were detailed in the

September 1986 APDU. The APDU added an estimated $1.96 million to development costs for software modifications.

Following implementation, additional funding was requested to correct deficiencies with EPICS. A 1987 APDU requested $548,120 for additional equipment. The 1988 APDU requested a total of $5.59 million for the migration effort, network upgrade, and technical assistance. The total requested in the 1989 APDU was $4.86 million. This APDU, which was submitted in August 1988, requested funding for migration, hardware, network upgrade, and operations. The APDU submitted in February 1993 requested $1.5 million for migration.

Total actual development costs for EPICS were calculated using figures from the 1986 APD for costs incurred between 1983 and 1985 and figures from the cost allocation (CA) spreadsheets for costs incurred between 1986 and 1988. The total actual EPICS development cost for FY 1983 to FY 1988 was approximately $7.7 million. Table 7.1 presents actual EPICS development expenditures incurred during the six-year period. Information provided includes the total system cost, the percentage and amount allocated to the Food Stamp Program, and the FNS share of EPICS costs with enhanced funding at the 75 percent Federal financial participation (FFP) rate.

Table 7.1 EPICS Development Costs

FY	Total Actual Expenditure	Cost Alloc. %	FSP Share (before FFP)	FNS Share (at 75% FFP)
1983	$264,352	8.23%	$21,759	$16,319
1984	873,927	39.71%	347,033	260,275
1985	1,653,366	40.68%	672,563	504,422
1986	3,095,621	44.66%	1,382,510	1,036,883
1987	774,686	45.37%	351,470	263,603
1988	1,004,193	47.08%	472,753	354,565
Total	$7,666,445	42.37%	$3,248,088	$2,436,067

Actual costs for EPICS system enhancements between 1991 and 1993 also were provided. Enhancement costs for FY 1991, FY 1992, and the first quarter of FY 1993 were $1,146,157, $1,035,291, and $685,810, respectively. These costs were allocated as follows:

- For FY 1991, the FSP allocation represented 31.27 percent of enhancement costs or $358,415.

- For FY 1992, the FSP allocation represented 32.17 percent of enhancement costs, $333,041.

- For FY 1993, the FSP allocation represented 29.96 percent of enhancement costs, $205,499.

All enhancement costs were subject to reimbursement at 50 percent FFP. The FNS share of enhancement costs, therefore, was $179,208 for FY 1991, $166,521 for FY 1992, and $102,750 for the first quarter of FY 1993.

7.1.1 EPICS System Components

EPICS supports the AFDC, Food Stamp, and Medicaid Programs.

7.1.2 Major Development Cost Components

The major components of development cost were contractor costs, hardware, and State personnel costs. The actual expenditures incurred in each category are discussed below.

7.1.2.1 Hardware

The 1986 APDU detailed annual hardware and software expenditures which were incurred during the development phase. The total cost was approximately $2.3 million. Exhibit A-7.1 in Appendix A provides a breakdown of this total by purchase and Fiscal Year.

7.1.2.2 Contractor Costs

On February 7, 1984, a fixed-price contract for $1.3 million was awarded to Systemhouse to develop EPICS. The period of performance was 2.5 years. The contract amount was later increased by $600,000 to accommodate a change in system requirements.

7.1.2.3 State Personnel Costs

Charges for State personnel comprised a significant portion of the development cost because State staff participation occurred throughout the development process. State personnel were involved in the following project tasks:

- Task 1 - Develop APD
- Task 2 - Develop RFP
- Task 3 - Evaluate proposals
- Task 4 - Develop equipment RFP
- Task 5 - Identify system requirements
- Task 6 - Participate in system design
- Task 7 - Participate in sub-system design
- Task 8 - Develop computer procedures
- Task 9 - Develop administrative procedures

- Task 10 - Participate in system development and testing
- Task 11 - Participate in conversion
- Task 12 - Conduct training
- Task 13 - Conduct system audit

The total cost for personnel services charged to these tasks was approximately $3.55 million. This amount included $2.30 million for data processing personnel and $1.25 million for program personnel.

7.2 Operational Costs

Total EPICS operational costs for FY 1991, FY 1992, and the first quarter of FY 1993 are provided in Table 7.2. Data presented includes the operational cost for the EPICS system, the FSP cost allocation percentage, the FSP share of EPICS operational costs, and the FNS share of operational costs at the 50 percent FFP rate. Cost allocation percentages are based on random moment sampling (RMS) percentages.

Table 7.2 EPICS Operational Costs

FY	Operational Cost	CA %	FSP Share (Before FFP)	FNS Share (with 50% FFP)
1991	$2,573,503	31.36%	$807,147	$403,574
1992	3,066,400	32.03%	982,249	491,125
1993 (1st Qtr.)	1,870,765	29.55%	552,761	276,381

7.2.1 Cost Per Case

The monthly cost per case for FY 1992 was $3.09. This cost was calculated using the 1992 Food Stamp monthly caseload of 26,484 households and the 1992 average monthly FSP share of EPICS costs, $81,854.

7.2.2 ADP Operational Cost Control Measures and Practices

DHW implemented a new accounting system, the Financial Information System with Cost Allocation (FISCAL), in July 1993. FISCAL accumulates all EPICS operational costs using grant codes (e.g., cost centers). The most significant EPICS operational costs are accumulated under the following categories:

- ***Information Systems A.*** This category includes all costs related to the administration, systems support, and programming functions of the Bureau of Computer Services as well as direct costs from the State Auditor for computer use.

- ***Information Systems B.*** This category includes costs related to data processing, systems development and maintenance, document control, data entry, and reporting.

FISCAL uses the following grant codes to accumulate EPICS and Food Stamp Program operational costs:

- A1400900 - Captures information systems A costs
- A1501000 - Captures information systems B costs
- A1972000 - Captures EPICS regular costs
- A1972100 - Captures EPICS enhancement costs
- B3170X00 - Captures EPICS Food Stamp Program operational costs
- 62600D00 - Captures Food Stamp Program administrative costs

7.3 Idaho Cost Allocation Methodologies

This section describes the methodology used to allocate EPICS development and operational costs.

7.3.1 Historical Overview of Development Cost Allocation Methodology

Idaho changed its cost allocation approach several times during EPICS development. During the planning phase, DHW used data element percentages to estimate each program's share of development cost. These percentages were based on data elements

Federal programs based on RMS. Both direct and indirect EPICS charges are detailed below.

7.3.2.1 Direct EPICS Charges

Currently, the only direct EPICS operational cost is the State Auditor charge incurred by EPICS for computer use.

7.3.2.2 Indirect EPICS Charges

Operational costs which are allocated to the EPICS grant code using the appropriate allocation basis include:

- ADP technical staff salaries
- ADP management and administrative staff salaries
- ADP support staff salaries
- ADP operations staff salaries
- Non-program personnel salaries
- State personnel salaries

7.3.2.3 Allocation Mechanics

The following steps summarize the steps executed to complete cost allocation and prepare the SF-269 report:

1) After cost allocation, a fund split procedure automatically distributes the direct and indirect costs to the appropriate Federal and State shares.

2) A grant adjustment process is then performed by downloading the cost allocation data by grant to a PC for review and adjustment. This review is performed by DHW grant reporters, staff who prepare grant reports.

3) Any adjustments made by the grant reporters are uploaded and posted to FISCAL's grant and operating files. This process regenerates the Federal and State shares of direct and indirect costs.

4) Food Stamp Program costs then can be extracted and manipulated from the FISCAL cost allocation reports so that the SF-269 can be completed.

APPENDIX A

STATE OF IDAHO

EXHIBITS

Exhibit A-2.1
Response to Regulatory Changes

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
1.1	1: Mickey Leland Memorial Domestic Hunger Relief Act	1: Excludes as income State or local GA payments to DHHS provided as vendor payments. 273.9(c)(1)(ii)(F)	8/1/91	N/A	N/A	N/A
1.2	1: Mickey Leland Memorial Domestic Hunger Relief Act	2: Excludes from income annual school clothing allowance however paid. 273.9(c)(5)(i)(F)	8/1/91	N/A	N/A	N/A
1.3	1: Mickey Leland Memorial Domestic Hunger Relief Act	3: Excludes as resource for Food Stamp purposes, household resources exempt by Public Assistance (PA) and SSI in mixed household. 273.8(e)(17)	2/1/92*	N	N	Y
1.4	1: Mickey Leland Memorial Domestic Hunger Relief Act	4: State agency shall use a standard estimate of shelter expense for households with homeless members. 273.9(d)(5)(i)	2/1/92*	N	N	Y
2.1	2: Administrative Improvement & Simplification regulations of the Hunger Prevention Act	1: Extended resource exclusion of farm property and vehicles. 273.8(e)(5),etc.	7/1/89	N	N	Y
2.2	2: Administrative Improvement & Simplification regulations of the Hunger Prevention Act	2: Combined initial allotment under normal time frames. 274.2(b)(2)	1/1/90	Y	Y	Y
2.3	2: Administrative Improvement & Simplification regulations of the Hunger Prevention Act	3: Combined initial allotment under expedited service time frames. 274.2(b)(3)	1/1/90	Y	Y	Y

Exhibit A-2.1
Response to Regulatory Changes

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
3.1	3: Disaster Assistance Act & Non-Discretionary regulations of the Hunger Prevention Act	1: Exclusion of job stream migrant vendor payments. 273.9(c)(1)(ii)	9/1/88	Y	N	Y
3.2	3: Disaster Assistance Act & Non-Discretionary regulations of the Hunger Prevention Act	2: Exclusion of advance earned income tax credit payments. 273.9(c)(14)	1/1/89*	N	N	Y
3.3	3: Disaster Assistance Act & Non-Discretionary regulations of the Hunger Prevention Act	3: Increase dependent care deductions. 273.9(f)(4), etc.	10/1/88	Y	Y	Y
3.4	3: Disaster Assistance Act & Non-Discretionary regulations of the Hunger Prevention Act	4: Eliminate migrant initial month proration. 273.10(a)(1)(ii)	9/1/88	Y	Y	Y
4.1	4: Issuance	1: Mail issuance must be staggered over at least ten days. 274.2(c)(1)	4/1/89	Y	Y	N
4.2	4: Issuance	2: Limitation on the number of replacement issuances. 274.6(b)(2)	10/1/89	Y	N	Y
4.3	4: Issuance	3: Destruction of unusable coupons within 30 days. 274.7(f)	4/1/89	Y	N	N

* These dates were changed after the State completed this form and the site visit occurred; therefore, the responses to these particular regulatory changes may be inaccurate.

Exhibit A-6.1
State of Idaho Hardware Inventory

Component	Make	Acquisition Method	Number/ Features
CPU			
3090/300J	IBM	Purchase	2 processors, 128 MB main memory, 64 to 192 MB shared expanded memory
DISK			
3380	IBM	Purchase	93 GB (52)
3390	IBM	Purchase	248 GB (103)
TAPE			
Cartridge Drives	IBM	Purchase	3480 autoloader (12)
9 Track	IBM	Purchase	3420 (3)
PRINTERS			
Impact	IBM	Purchase	4245 (1)
Page	IBM	Purchase	3835 (1)
FRONT ENDS			
FEP	IBM	Purchase	3725 (1)
REMOTE EQUIPMENT			
Minicomputers	IBM	Purchase	8150 (7)
Workstations	IBM	Purchase	31XX Terminals (600 to 1,000)

Exhibit A-7.1
EPICS Equipment and Software Expenditures

DESCRIPTION	1984	1985	1986	1987	1988	TOTAL
Terminals with attached printers	$392,000	$170,761	$11,000	--	--	$573,761
Tape Drive and Cleaner	14,650	5,000	--	--	--	19,650
Line Printers	120,300	13,500	--	--	--	133,800
Character Printers	169,100	--	--	--	--	169,100
Installation	20,500	16,000	1,500	--	--	38,000
Equipment Freight	10,000	2,000	1,000	--	--	38,050
Leased Lines	--	--	--	97,520	89,000	186,520
Microwave and Modem Usage	--	--	--	72,200	64,500	136,700
Equipment Installation	34,550	--	3,500	--	--	13,000
Remote Processors	500,300	--	--	--	--	500,300
Remote Processor Upgrades	--	161,220	196,000	--	--	357,220
Microprocessors	--	10,700	--	--	--	10,700
Proprietary Software	60,000	45,500	--	6,500	6,800	118,800
Total	**1,321,400**	**424,681**	**213,000**	**176,220**	**160,300**	**$2,295,601**

APPENDIX B

STATE OF IDAHO

ANALYSIS OF OPERATOR USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Operational Level User Satisfaction Survey. Frequency counts of responses to all applicable items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Operational Level User Satisfaction Survey are the perceptions of eligibility workers in Idaho. In other words, these responses do not necessarily represent a "true" description of the situation in Idaho. For example, the results presented regarding the response time of the system reflect the workers' perceptions about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The survey was sent to 63 eligibility workers. The following table summarizes the potential population size and the final size of the sample who responded.

Number of EWs in Idaho	Number Selected to Receive Survey	Percentage Selected
260	63	24.2%
	Number Responding to Survey	Response Rate
	50	79.4%

The eligibility workers selected to receive the survey were selected randomly so their perceptions should be representative of eligibility workers in Idaho. The response rate of 79 percent is good, producing a sample whose responses should be representative of the eligibility workers in Idaho.

Since Idaho's current system has been operational for more than five years, comparisons between the current and previous systems would be of limited value. Questions that compare the old system and current system are therefore not included.

Summary of Findings

Most of the respondents are satisfied with the computer system in Idaho. They generally find it responsive, accurate, and fairly easy to use. Two complaints are that response time is sometimes too slow and that the system is down too often.

Most respondents also think the computer system helps them do their jobs and makes them more efficient, although 30 percent feel that the system adds stress to their jobs.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents (%)
Poor	7	14.0
Good	37	74.0
Excellent	6	12.0

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents (%)
Poor	24	48.0
Good	24	48.0
Excellent	2	4.0

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents (%)
Rarely	5	10.0
Sometimes	33	66.0
Often	12	24.0

Almost all of the eligibility workers think the system response time is generally good but a significant proportion (90 percent) indicate that response time is sometimes or often too slow.

Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents (%)
Sometimes	13	26.0
Often	37	74.0

How often is the system down?

	Number of Respondents	Percentage of Respondents (%)
Rarely	6	12.0
Sometimes	36	72.0
Often	8	16.0

Most of the eligibility workers feel the system is available when they need to use it, although 88 percent also think that the system is sometimes or often down which detracts from the perception that the system is generally available.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents (%)
Poor	3	6.0
Good	41	82.0
Excellent	6	12.0

How often is a case terminated in error?

	Number of Respondents	Percentage of Respondents(%)
Rarely	28	56.0
Sometimes	21	42.0
Often	1	2.0

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents(%)
Rarely	32	64.0
Sometimes	18	36.0

How often is the systems data out-of-date?

	Number of Respondents	Percentage of Respondents(%)
Rarely	31	62.0
Sometimes	15	30.0
Often	4	8.0

The eligibility workers feel that the information in the system is generally good or excellent but significant percentages feel the system is error prone, erroneously terminating cases for example.

Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	32	64.0
Sometimes	18	36.0

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	33	66.0
Sometimes	13	26.0
Often	4	8.0

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	72.4
Sometimes	8	27.6

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents(%)
Rarely	27	71.1
Sometimes	10	26.3
Often	1	2.6

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	31	63.3
Sometimes	16	32.7
Often	2	4.1

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	35	72.9
Sometimes	10	20.8
Often	3	6.3

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents(%)
Rarely	22	78.6
Sometimes	5	17.9
Often	1	3.6

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents (%)
Rarely	33	66.0
Sometimes	17	34.0

How often do you have difficulty identifying recipients already known to the State?

	Number of Respondents	Percentage of Respondents (%)
Rarely	42	84.0
Sometimes	8	16.0

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents (%)
Rarely	31	63.3
Sometimes	17	34.7
Often	1	2.0

How often do you have difficulty updating eligibility and benefit information?

	Number of Respondents	Percentage of Respondents (%)
Rarely	34	69.4
Sometimes	14	28.6
Often	1	2.0

How often do you have difficulty identifying cases which are overdue for recertification?

	Number of Respondents	Percentage of Respondents(%)
Rarely	41	82.0
Sometimes	8	16.0
Often	1	2.0

How often do you have difficulty monitoring the status of all hearings?

	Number of Respondents	Percentage of Respondents(%)
Rarely	13	41.9
Sometimes	9	29.0
Often	9	29.0

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	38.9
Sometimes	13	36.1
Often	9	25.0

How often do you have difficulty automatically notifying households of case actions?

	Number of Respondents	Percentage of Respondents (%)
Rarely	28	58.3
Sometimes	19	39.6
Often	1	2.1

How often do you have difficulty notifying recipients that recertification is required?

	Number of Respondents	Percentage of Respondents (%)
Rarely	41	85.4
Sometimes	6	12.5
Often	1	2.1

How often do you have difficulty identifying cases making payments through recoupment?

	Number of Respondents	Percentage of Respondents (%)
Rarely	27	61.4
Sometimes	13	29.5
Often	4	9.1

How often do you have difficulty identifying cases making payments through recoupment?

	Number of Respondents	Percentage of Respondents (%)
Rarely	27	61.4
Sometimes	13	29.5
Often	4	9.1

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents (%)
Rarely	13	31.0
Sometimes	17	40.5
Often	12	28.6

How often do you have difficulty identifying cases involving suspected fraud?

	Number of Respondents	Percentage of Respondents (%)
Rarely	19	40.4
Sometimes	22	46.8
Often	6	12.8

FOOD STAMP PROGRAM NEEDS

Worker Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents (%)
Sometimes	14	28.0
Often	36	72.0

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents (%)
Rarely	8	16.0
Sometimes	28	56.0
Often	14	28.0

How often is the system more of a problem than a help?

	Number of Respondents	Percentage of Respondents (%)
Rarely	25	50.0
Sometimes	22	44.0
Often	3	6.0

The eligibility workers feel that the system helps them with their work but also adds stress to the job and half feel that the system is sometimes or often a problem.

Client Service

How often is expedited service difficult to achieve?

	Number of Respondents	Percentage of Respondents (%)
Rarely	23	46.9
Sometimes	23	46.9
Often	3	6.1

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents (%)
Rarely	26	53.1
Sometimes	20	40.8
Often	3	6.1

Around half of the eligibility workers who responded agree that expedited service is rarely difficult to provide, while more than 40 percent feel that it is sometimes difficult to provide.

Fraud and Errors

Because Idaho's system was implemented more than five years ago, this section comparing the current system to the previous system was not applicable.

APPENDIX C

STATE OF IDAHO

ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Managerial Level User Satisfaction Survey. Frequency counts of responses to all items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Managerial Level User Satisfaction Survey are the perceptions of supervisors in Idaho. In other words, these responses do not necessarily represent a "true" description of the situation in Idaho. For example, the results presented regarding the response time of the system reflect the managers' perceptions about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The survey was sent to 30 local office supervisors. The following table summarizes the potential population size and the final size of the sample who responded.

Number of Supervisors in Idaho	Number Selected to Receive Survey	Percentage Selected
39	30	76.9%
	Number Responding to Survey	Response Rate
	20	66.6%

The proportion of supervisors selected to receive the survey is large and they were selected randomly so their perceptions should be representative of the population of supervisors in Idaho. The response rate of 67 percent is good, producing a sample whose responses should be representative of supervisors in Idaho.

Summary of Findings

Most of the supervisors think the system is very good and helps them in their jobs. Almost all respondents found the system easy to use although half had some difficulty learning to use it. Fifty percent of the respondents also felt that mass changes were difficult to accomplish with this system.

Since Idaho's current system has been operational for more than five years, comparisons between the current and previous systems would be of limited value. Questions that compare the old system and current system are therefore not included.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents
Poor	1	5.0
Good	16	80.0
Excellent	3	15.0

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents
Poor	7	35.0
Good	12	60.0
Excellent	1	5.0

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents
Rarely	8	40.0
Sometimes	11	55.0
Often	1	5.0

The supervisors who responded almost all agree that the system's response time is generally good or excellent although over half (65 percent) think the system response time is too slow sometimes or often.

Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents
Sometimes	1	5.0
Often	19	95.0

How often is the system down?

	Number of Respondents	Percentage of Respondents
Rarely	3	15.0
Sometimes	16	80.0
Often	1	5.0

The supervisors who responded almost all think the system is generally available but a significant majority, 85 percent, think it is sometimes or often down.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents
Good	16	84.2
Excellent	3	15.8

The supervisors who responded generally find the information and algorithms of the system to be accurate. All of those responding think the information in the system is either good or excellent.

Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents
Rarely	14	73.7
Sometimes	5	26.3

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents
Rarely	10	50.0
Sometimes	9	45.0
Often	1	5.0

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents
Rarely	12	92.3
Sometimes	1	7.7

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents
Rarely	14	93.3
Sometimes	1	6.7

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents
Rarely	11	55.0
Sometimes	7	35.0
Often	2	10.0

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents
Rarely	13	68.4
Sometimes	4	21.1
Often	2	10.5

Table of Contents

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents
Rarely	10	76.9
Sometimes	2	15.4
Often	1	7.7

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents
Rarely	14	70.0
Sometimes	5	25.0
Often	1	5.0

A majority of the supervisors do not find it difficult to obtain information although a significant percentage experience some difficulty in learning the system. Those who responded rarely have difficulty performing such specific tasks as tracking monthly reporting forms or automatically terminating benefits.

FOOD STAMP PROGRAM NEEDS

[redacted]

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents
Rarely	7	35.0
Sometimes	9	45.0
Often	4	20.0

Most of the supervisors who responded think that the current system is a great help to them in their work although a majority (65 percent) feel that it sometimes or often contributes added stress.

Management Needs

What is the quality of the reports produced by the system?

	Number of Respondents	Percentage of Respondents
Poor	2	10.0
Good	18	90.0

What is the quality of the support provided by the technical staff supporting the automated system?

	Number of Respondents	Percentage of Respondents
Poor	4	20.0
Good	10	50.0
Excellent	6	30.0

How often do you have difficulty making mass changes to the system?

	Number of Respondents	Percentage of Respondents
Rarely	6	50.0
Sometimes	5	41.7
Often	1	8.3

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents
Rarely	11	84.6
Sometimes	2	15.4

Most of the supervisors responding think the system helps them in their management tasks, with 90 percent thinking the reports produced by the system are good. Almost everyone thinks the support provided by the technical staff is good or excellent.

Client Service

Because Idaho's system was implemented more than five years ago, this section comparing the current system to the previous system was not applicable.

Fraud and Errors

Because Idaho's system was implemented more than five years ago, this section comparing the current system to the previous system was not applicable.